

WEST Search History

DATE: Friday, April 18, 2003

Set Name Query
side by side

Hit Count Set Name
result set

DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ

L1	ionizer or (ion with (generator or generating or emitter))	28924	L1
L2	ionizer or (ion with (generator or generating or emitter or precipitator or collector))	33579	L2
L3	L2 and (electrode with (shape or Z or bent or corrugated or corrugation or angular or pleated))	2271	L3
L4	L2 and (electrode with (shape or Z or bent or corrugated or corrugation or angular or angle or angled or pleat or pleated))	2598	L4
L5	L4 and (air conditioner or air purifier or air cleaner or air purifying or air conditioning)	87	L5

END OF SEARCH HISTORY

L Number	Hits	Search Text	DB	Time stamp
1	32292	ionizer or (ion with (generator or generating or emitter or emitting))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/18 15:33
2	36724	ionizer or (ion with (generator or generating or emitter or emitting or precipitor or collector))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/18 15:33
3	42196	ionizer or (ion with (generator or generating or emitter or emitting or precipitor or precipitating or collector or collecting))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/18 15:34
4	3937	(ionizer or (ion with (generator or generating or emitter or emitting or precipitor or precipitating or collector or collecting))) and (electrode with (shape or shaped or Z or bent or corrugated or corrugation or corrugating or angular or angle or angled or pleat or pleated or pleating))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/18 15:35
5	142	((ionizer or (ion with (generator or generating or emitter or emitting or precipitor or precipitating or collector or collecting))) and (electrode with (shape or shaped or Z or bent or corrugated or corrugation or corrugating or angular or angle or angled or pleat or pleated or pleating))) and (air with (conditioner or conditioning or purifier or purifying or cleaner))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/18 15:37
6	69	((((ionizer or (ion with (generator or generating or emitter or emitting or precipitor or precipitating or collector or collecting))) and (electrode with (shape or shaped or Z or bent or corrugated or corrugation or corrugating or angular or angle or angled or pleat or pleated or pleating))) and (air with (conditioner or conditioning or purifier or purifying or cleaner))) and (inlet or intake) and outlet	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/18 15:37

Generate Collection

Print

Search Results - Record(s) 1 through 50 of 87 returned.

☐ 1. Document ID: US 20030072675 A1

L5: Entry 1 of 87

File: PGPB

Apr 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030072675
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030072675 A1

TITLE: Sterilization method, ion generating device, ion generating device, and air conditioning device

PUBLICATION-DATE: April 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Takeda, Yasukata	Osaka-shi		JP	
Sekoguchi, Yoshinori	Osaka-shi		JP	
Furukawa, Takeshi	Osaka-shi		JP	
Morikawa, Mamoru	Osaka-shi		JP	
Noguchi, Katsutoshi	Osaka-shi		JP	
Nojima, Hideo	Osaka-shi		JP	
Nishikawa, Kazuo	Osaka-Shi		JP	
Miyata, Akio	Osaka-Shi		JP	

US-CL-CURRENT: ~~422/22~~; ~~422/186.04~~, ~~422/29~~

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC
Draw Desc	Image										

☐ 2. Document ID: US 20030068557 A1

L5: Entry 2 of 87

File: PGPB

Apr 10, 2003

PGPUB-DOCUMENT-NUMBER: 20030068557
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030068557 A1

TITLE: Lithium secondary battery positive electrode plate and lithium secondary battery

PUBLICATION-DATE: April 10, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kumashiro, Yoshiaki	Hitachi		JP	
Kasai, Masahiro	Mito		JP	
Takeuchi, Seiji	Hitachiota		JP	

US-CL-CURRENT: ~~429/231.8~~; ~~429/232~~, ~~429/61~~

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 3. Document ID: US 20030005824 A1

L5: Entry 3 of 87

File: PGPB

Jan 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030005824
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030005824 A1

TITLE: Dust collecting apparatus and air-conditioning apparatus

PUBLICATION-DATE: January 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Katou, Ryou	Aichi		JP	
Tashiro, Yoshikazu	Aichi		JP	

US-CL-CURRENT: 96/35

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 4. Document ID: US 20020180843 A1

L5: Entry 4 of 87

File: PGPB

Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020180843
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020180843 A1

TITLE: Piezoelectric element, actuator, and inkjet head

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Irie, Yousuke	Nara-shi		JP	
Yokoyama, Kazuo	Hirakata-shi		JP	

US-CL-CURRENT: 347/70

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 5. Document ID: US 20020155026 A1

L5: Entry 5 of 87

File: PGPB

Oct 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020155026
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020155026 A1

TITLE: Electrostatic disinfectant delivery

PUBLICATION-DATE: October 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lins, Claudio L.K.	Racine	WI	US	

US-CL-CURRENT: 422/4; 422/28

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMOC
Draw Desc	Image									

☐ 6. Document ID: US 20020152890 A1

L5: Entry 6 of 87

File: PGPB

Oct 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020152890
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020152890 A1

TITLE: Electrically enhanced air filter with coated ground electrode

PUBLICATION-DATE: October 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Leiser, Randal D.	Middleton	WI	US	

US-CL-CURRENT: 95/63

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMOC
Draw Desc	Image									

☐ 7. Document ID: US 20020150520 A1

L5: Entry 7 of 87

File: PGPB

Oct 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020150520
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020150520 A1

TITLE: Electro-kinetic air transporter-conditioner devices with enhanced emitter electrode

PUBLICATION-DATE: October 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	
Lee, Jim L.	Rohnert Park	CA	US	

US-CL-CURRENT: 422/186.04

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 8. Document ID: US 20020134665 A1

L5: Entry 8 of 87

File: PGPB

Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020134665

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020134665 A1

TITLE: Electro-kinetic air transporter-conditioner devices with trailing electrode

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	
Lee, Jim L.	Rohnert Park	CA	US	

US-CL-CURRENT: 204/164; 422/186.04

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 9. Document ID: US 20020134664 A1

L5: Entry 9 of 87

File: PGPB

Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020134664

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020134664 A1

TITLE: Electro-kinetic air transporter-conditioner devices with an upstream focus electrode

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	
Lee, Jim L.	Rohnert Park	CA	US	

US-CL-CURRENT: 204/164; 422/186.04

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 10. Document ID: US 20020127156 A1

L5: Entry 10 of 87

File: PGPB

Sep 12, 2002

PGPUB-DOCUMENT-NUMBER: 20020127156

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020127156 A1

TITLE: Electro-kinetic air transporter-conditioner devices with enhanced collector electrode

PUBLICATION-DATE: September 12, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	

US-CL-CURRENT: 422/186

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 11. Document ID: US 20020122752 A1

L5: Entry 11 of 87

File: PGPB

Sep 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020122752
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020122752 A1

TITLE: Electro-kinetic air transporter-conditioner devices with interstitial electrode

PUBLICATION-DATE: September 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	
Lau, Shek Fai	Foster City	CA	US	

US-CL-CURRENT: 422/186

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 12. Document ID: US 20020122751 A1

L5: Entry 12 of 87

File: PGPB

Sep 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020122751
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020122751 A1

TITLE: Electro-kinetic air transporter-conditioner devices with a enhanced collector electrode for collecting more particulate matter

PUBLICATION-DATE: September 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Sinaiko, Robert J.	San Francisco	CA	US	
Taylor, Charles E.	Sebastopol	CA	US	

US-CL-CURRENT: 422/186

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

☐ 13. Document ID: US 20020098131 A1

L5: Entry 13 of 87

File: PGPB

Jul 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020098131
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020098131 A1

TITLE: Electro-kinetic air transporter-conditioner device with enhanced cleaning features

PUBLICATION-DATE: July 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	
Lau, Shek Fai	Foster City	CA	US	

US-CL-CURRENT: 422/186.04; 204/164, 204/176, 422/186.07

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

☐ 14. Document ID: US 20020079212 A1

L5: Entry 14 of 87

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020079212
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020079212 A1

TITLE: Electro-kinetic air transporter-conditioner

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	
Lau, Shek Fai	Foster City	CA	US	

US-CL-CURRENT: 204/164; 204/176, 422/186.04, 422/186.07

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

☐ 15. Document ID: US 20020062836 A1

L5: Entry 15 of 87

File: PGPB

May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020062836
PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020062836 A1

TITLE: Ion generator and hairbrush using the same

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Saida, Itaru	Hikone-shi		JP	
Kitamura, Hisashi	Hikone-shi		JP	

US-CL-CURRENT: 132/271; 607/79

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 16. Document ID: US 20020033448 A1

L5: Entry 16 of 87

File: PGPB

Mar 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020033448

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020033448 A1

TITLE: Microscale mass spectrometric chemical-gas sensor

PUBLICATION-DATE: March 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Berger, Philip S.	St. Louis	MO	US	
Gentry, W. Ronald	Port Townsend	WA	US	

US-CL-CURRENT: 250/296

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 17. Document ID: US 20010048906 A1

L5: Entry 17 of 87

File: PGPB

Dec 6, 2001

PGPUB-DOCUMENT-NUMBER: 20010048906

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010048906 A1

TITLE: Electrode self-cleaning mechanism for electro-kinetic air transporter-conditioner devices

PUBLICATION-DATE: December 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lau, Shek Fai	Foster City	CA	US	
Lee, Jimmy L.	Rohnert Park	CA	US	
Parker, Andrew J.	Sausalito	CA	US	

US-CL-CURRENT: 422/186; 134/104.1, 134/201, 361/226, 361/230

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

☐ 18. Document ID: US 20010046107 A1

L5: Entry 18 of 87

File: PGPB

Nov 29, 2001

PGPUB-DOCUMENT-NUMBER: 20010046107

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010046107 A1

TITLE: Actuator, information recording/reproducing device, and method of manufacturing actuator

PUBLICATION-DATE: November 29, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Irie, Yousuke	Nara		JP	
Yokoyama, Kazuo	Osaka		JP	

US-CL-CURRENT: 360/294.4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

☐ 19. Document ID: US 20010025570 A1

L5: Entry 19 of 87

File: PGPB

Oct 4, 2001

PGPUB-DOCUMENT-NUMBER: 20010025570

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010025570 A1

TITLE: Air cleaner, air cleaning method, and air cleaner with sterilization

PUBLICATION-DATE: October 4, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Fukushima, Fumio	Tokyo		JP	

US-CL-CURRENT: 95/57; 96/55

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

☐ 20. Document ID: US 20010004046 A1

L5: Entry 20 of 87

File: PGPB

Jun 21, 2001

PGPUB-DOCUMENT-NUMBER: 20010004046

PGPUB-FILING-TYPE: new-utility

DOCUMENT-IDENTIFIER: US 20010004046 A1

TITLE: Electro-kinetic air transporter-conditioner

PUBLICATION-DATE: June 21, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Taylor, Charles E.	Sebastopol	CA	US	
Lau, Shek Fai	Foster City	CA	US	

US-CL-CURRENT: 204/176; 422/186.07

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 21. Document ID: US 6544485 B1

L5: Entry 21 of 87

File: USPT

Apr 8, 2003

US-PAT-NO: 6544485

DOCUMENT-IDENTIFIER: US 6544485 B1

TITLE: Electro-kinetic device with enhanced anti-microorganism capability

DATE-ISSUED: April 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Taylor; Charles E.	Sebastopol	CA		

US-CL-CURRENT: 422/186.04; 422/121, 422/186.12, 422/186.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 22. Document ID: US 6497973 B1

L5: Entry 22 of 87

File: USPT

Dec 24, 2002

US-PAT-NO: 6497973

DOCUMENT-IDENTIFIER: US 6497973 B1

TITLE: Electroconversion cell

DATE-ISSUED: December 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Amendola; Steven	Ocean	NJ		

US-CL-CURRENT: 429/19; 204/253, 204/254, 205/343, 205/345, 205/637, 429/21, 429/34

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 23. Document ID: US 6494934 B2

L5: Entry 23 of 87

File: USPT

Dec 17, 2002

US-PAT-NO: 6494934

DOCUMENT-IDENTIFIER: US 6494934 B2

TITLE: Air cleaner, air cleaning method, and air cleaner with sterilization

DATE-ISSUED: December 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fukushima; Fumio	Tokyo			JP

US-CL-CURRENT: 95/63; 95/73, 95/77, 96/225, 96/55, 96/94, 96/96

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 24. Document ID: US 6491743 B1

L5: Entry 24 of 87

File: USPT

Dec 10, 2002

US-PAT-NO: 6491743

DOCUMENT-IDENTIFIER: US 6491743 B1

TITLE: Electronic cartridge filter

DATE-ISSUED: December 10, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Joannou; Constantinos J.	Nepean Ontario		K2H 5S3	CA
French; David J.	Aylmer, Quebec		J9H 4P5	CA

US-CL-CURRENT: 96/67; 55/521, 96/98

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 25. Document ID: US 6475680 B1

L5: Entry 25 of 87

File: USPT

Nov 5, 2002

US-PAT-NO: 6475680

DOCUMENT-IDENTIFIER: US 6475680 B1

TITLE: Lithium secondary battery, its electrolyte, and electric apparatus using the same

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Arai; Juichi	Katsura-mura			JP
Katayama; Hideaki	Hitachi			JP
Akahoshi; Haruo	Hitachi			JP
Takamura; Tomoe	Hitachi			JP
Iwayanagi; Takao	Tokyo			JP

US-CL-CURRENT: 429/340; 429/330, 429/336

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 26. Document ID: US 6475655 B1

L5: Entry 26 of 87

File: USPT

Nov 5, 2002

US-PAT-NO: 6475655

DOCUMENT-IDENTIFIER: US 6475655 B1

TITLE: Fuel cell system with hydrogen gas separation

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nakanishi; Haruyuki	Osaka			JP
Tanaka; Hirohisa	Osaka			JP
Yamada; Koji	Osaka			JP
Abe; Masahiro	Osaka			JP
Asazawa; Koichiro	Osaka			JP

US-CL-CURRENT: 429/19; 429/12, 429/13, 429/17, 429/22, 429/30, 429/34, 429/35, 429/37, 429/38, 429/64

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 27. Document ID: US 6405551 B1

L5: Entry 27 of 87

File: USPT

Jun 18, 2002

US-PAT-NO: 6405551

DOCUMENT-IDENTIFIER: US 6405551 B1

TITLE: Heating apparatus having refrigeration cycle

DATE-ISSUED: June 18, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kuwabara; Katumi	Saitama			JP
Wakikawa; Junji	Saitama			JP
Takahashi; Mitiyuki	Saitama			JP
Kobayashi; Akihiro	Saitama			JP

US-CL-CURRENT: 62/238.7; 62/238.6, 62/318, 62/319, 62/324.3, 62/434

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 28. Document ID: US 6398852 B1

L5: Entry 28 of 87

File: USPT

Jun 4, 2002

US-PAT-NO: 6398852

DOCUMENT-IDENTIFIER: US 6398852 B1

TITLE: Device for air cleaning

DATE-ISSUED: June 4, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Loreth; Andrzej	Akersberga			SE

US-CL-CURRENT: 96/63; 55/498, 55/520, 96/69, 96/88, 96/98

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 29. Document ID: US 6375714 B1

L5: Entry 29 of 87

File: USPT

Apr 23, 2002

US-PAT-NO: 6375714

DOCUMENT-IDENTIFIER: US 6375714 B1

TITLE: Device and process to produce active oxygen ions in the air for improved air quality

DATE-ISSUED: April 23, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rump; Hanns	Hausen			DE
Kiesewetter; Olaf	Geschwenda			DE

US-CL-CURRENT: 95/3; 361/235, 96/19, 96/96, 96/97

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 30. Document ID: US 6350417 B1

L5: Entry 30 of 87

File: USPT

Feb 26, 2002

US-PAT-NO: 6350417

DOCUMENT-IDENTIFIER: US 6350417 B1

**** See image for Certificate of Correction ****

TITLE: Electrode self-cleaning mechanism for electro-kinetic air transporter-conditioner devices

DATE-ISSUED: February 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lau; Shek Fai	Foster City	CA		
Lee; Jimmy Luther	Rohnert Park	CA		
Parker; Andrew J.	Sausalito	CA		

US-CL-CURRENT: 422/186.04; 422/186.07

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 31. Document ID: US 6228148 B1

L5: Entry 31 of 87

File: USPT

May 8, 2001

US-PAT-NO: 6228148

DOCUMENT-IDENTIFIER: US 6228148 B1

**** See image for Certificate of Correction ****

TITLE: Method for separating particles from an air flow

DATE-ISSUED: May 8, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Aaltonen; Rami	Turku			FI
Leimu; Juha	Turku			FI
Norri; Petri	Turku			FI

US-CL-CURRENT: 95/74; 55/431, 95/75, 95/78, 96/228, 96/44, 96/50, 96/61, 96/97

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 32. Document ID: US 6176977 B1

L5: Entry 32 of 87

File: USPT

Jan 23, 2001

US-PAT-NO: 6176977

DOCUMENT-IDENTIFIER: US 6176977 B1

TITLE: Electro-kinetic air transporter-conditioner

DATE-ISSUED: January 23, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Taylor; Charles E.	Sebastopol	CA		
Lau; Shek Fai	Foster City	CA		

US-CL-CURRENT: 204/176; 123/539, 132/272, 361/226, 361/230, 361/232, 422/186.07

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 33. Document ID: US 6163098 A

L5: Entry 33 of 87

File: USPT

Dec 19, 2000

US-PAT-NO: 6163098

DOCUMENT-IDENTIFIER: US 6163098 A

TITLE: Electro-kinetic air refreshener-conditioner with optional night light

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Taylor; Charles E.	Sebastopol	CA		
Lau; Shek Fai	Foster City	CA		

US-CL-CURRENT: 310/308; 361/230, 361/235, 96/15, 96/26, 96/70, 96/95, 96/98

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 34. Document ID: US 6136074 A

L5: Entry 34 of 87

File: USPT

Oct 24, 2000

US-PAT-NO: 6136074

DOCUMENT-IDENTIFIER: US 6136074 A

TITLE: Air conditioning apparatus with an air cleaning function and electric dust collector for use in the same

DATE-ISSUED: October 24, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Okamoto; Yoshikatsu	Osaka			JP
Ikuzawa; Yoshiaki	Osaka			JP
Okazaki; Akinori	Osaka			JP
Sakaue; Takao	Osaka			JP

US-CL-CURRENT: 96/62; 95/78, 96/63

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 35. Document ID: US 6129781 A

US-PAT-NO: 6129781
DOCUMENT-IDENTIFIER: US 6129781 A

TITLE: Air conditioning apparatus with an air cleaning function and electric dust collector for use in the same

DATE-ISSUED: October 10, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Okamoto; Yoshikatsu	Osaka			JP
Ikuzawa; Yoshiaki	Osaka			JP
Okazaki; Akinori	Osaka			JP
Sakaue; Takao	Osaka			JP

US-CL-CURRENT: 96/25; 55/282.3, 55/DIG.10, 95/73, 95/74, 96/28, 96/399, 96/74

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 36. Document ID: US 6077334 A

L5: Entry 36 of 87

File: USPT

Jun 20, 2000

US-PAT-NO: 6077334
DOCUMENT-IDENTIFIER: US 6077334 A

TITLE: Externally ionizing air filter

DATE-ISSUED: June 20, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Joannou; Constantinos J.	Aylmer, Quebec			CA

US-CL-CURRENT: 96/66; 96/97

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 37. Document ID: US 6001678 A

L5: Entry 37 of 87

File: USPT

Dec 14, 1999

US-PAT-NO: 6001678
DOCUMENT-IDENTIFIER: US 6001678 A

TITLE: Insulated gate semiconductor device

DATE-ISSUED: December 14, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Takahashi; Hideki	Tokyo			JP

US-CL-CURRENT: 438/238; 257/E21.384, 257/E29.201, 438/243, 438/245, 438/268, 438/271

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 38. Document ID: US 5982102 A

L5: Entry 38 of 87

File: USPT

Nov 9, 1999

US-PAT-NO: 5982102

DOCUMENT-IDENTIFIER: US 5982102 A

**** See image for Certificate of Correction ****

TITLE: Device for transport of air and/or cleaning of air using a so called ion wind

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Andrzej; Loreth	.ANG.kersberga			SE

US-CL-CURRENT: 315/111.91; 315/111.31, 315/111.81

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 39. Document ID: US 5977716 A

L5: Entry 39 of 87

File: USPT

Nov 2, 1999

US-PAT-NO: 5977716

DOCUMENT-IDENTIFIER: US 5977716 A

TITLE: Ion generator for a combustion device

DATE-ISSUED: November 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Motouchi; Kazuo	Nishi-ku, Kobe-shi, Hyogo 651-21			JP

US-CL-CURRENT: 315/111.91; 123/537, 250/423F

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 40. Document ID: US 5960264 A

L5: Entry 40 of 87

File: USPT

Sep 28, 1999

US-PAT-NO: 5960264
DOCUMENT-IDENTIFIER: US 5960264 A

TITLE: Method of manufacturing an insulated gate semiconductor device

DATE-ISSUED: September 28, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Takahashi; Hideki	Tokyo			JP

US-CL-CURRENT: 438/133; 257/E21.384, 257/E29.028, 257/E29.067, 257/E29.201, 438/138

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 41. Document ID: US 5801408 A

L5: Entry 41 of 87

File: USPT

Sep 1, 1998

US-PAT-NO: 5801408
DOCUMENT-IDENTIFIER: US 5801408 A

TITLE: Insulated gate semiconductor device and method of manufacturing the same

DATE-ISSUED: September 1, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Takahashi; Hideki	Tokyo			JP

US-CL-CURRENT: 257/212; 257/133, 257/220, 257/242, 257/244, 257/263, 257/302, 257/328, 257/E21.384, 257/E29.028, 257/E29.067, 257/E29.201

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 42. Document ID: US 5751024 A

L5: Entry 42 of 87

File: USPT

May 12, 1998

US-PAT-NO: 5751024
DOCUMENT-IDENTIFIER: US 5751024 A

TITLE: Insulated gate semiconductor device

DATE-ISSUED: May 12, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Takahashi; Hideki	Tokyo			JP

US-CL-CURRENT: 257/139; 257/143, 257/147, 257/149, 257/155, 257/172, 257/330, 257/331, 257/E21.384, 257/E29.201

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 43. Document ID: US 5728288 A

L5: Entry 43 of 87

File: USPT

Mar 17, 1998

US-PAT-NO: 5728288

DOCUMENT-IDENTIFIER: US 5728288 A

TITLE: Apparatus and method for producing air containing minus alkali ion

DATE-ISSUED: March 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kubo; Tetsujiro	Tokyo			JP

US-CL-CURRENT: 205/763; 204/248, 204/249, 204/277, 204/278, 205/745, 205/764

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 44. Document ID: US 5711788 A

L5: Entry 44 of 87

File: USPT

Jan 27, 1998

US-PAT-NO: 5711788

DOCUMENT-IDENTIFIER: US 5711788 A

TITLE: Dust neutralizing and flocculating system

DATE-ISSUED: January 27, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kim; Yong Jin	Dae Jeon			KR
Hong; Won Suk	Seoul			KR
Yeom; Han Geel	Dae Jeon			KR
Lee; Jae Ouk	Dae Jeon			KR
Moon; Yong Seung	Ansan			KR
Lee; Won Huy	Souwon			KR
Lee; Chan Yeol	Goun San			KR
Kim; Jung Ho	Ansan			KR

US-CL-CURRENT: 96/3; 361/226, 96/57, 96/75, 96/80

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 45. Document ID: US 5474599 A

L5: Entry 45 of 87

File: USPT

Dec 12, 1995

US-PAT-NO: 5474599
DOCUMENT-IDENTIFIER: US 5474599 A

TITLE: Apparatus for electrostatically cleaning particulates from air

DATE-ISSUED: December 12, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cheney; William A.	Cincinnati	OH		
Spurgin; Wendell P.	Cincinnati	OH		

US-CL-CURRENT: 96/55; 95/63, 95/78, 96/59, 96/66, 96/68, 96/99

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw. Desc	Image									

☐ 46. Document ID: US 5456741 A

L5: Entry 46 of 87

File: USPT

Oct 10, 1995

US-PAT-NO: 5456741
DOCUMENT-IDENTIFIER: US 5456741 A

TITLE: Air purifier

DATE-ISSUED: October 10, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Takahara; Toshihiro	Chiryu			JP
Katou; Kenichi	Nagoya			JP
Takeichi; Masakazu	Okazaki			JP

US-CL-CURRENT: 96/22; 95/6, 96/57, 96/59, 96/67, 96/96, 96/97

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw. Desc	Image									

☐ 47. Document ID: US 5403383 A

L5: Entry 47 of 87

File: USPT

Apr 4, 1995

US-PAT-NO: 5403383
DOCUMENT-IDENTIFIER: US 5403383 A

TITLE: Safe ionizing field electrically enhanced filter and process for safely ionizing a field of an electrically enhanced filter

DATE-ISSUED: April 4, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jaisinghani; Rajan	Midlothian	VA	23112	

US-CL-CURRENT: 95/69; 422/22, 422/4, 95/70, 95/78, 95/79, 96/223, 96/58, 96/59, 96/62, 96/67, 96/68, 96/96, 96/99

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWMC

☐ 48. Document ID: US 5382410 A

L5: Entry 48 of 87

File: USPT

Jan 17, 1995

US-PAT-NO: 5382410

DOCUMENT-IDENTIFIER: US 5382410 A

**** See image for Certificate of Correction ****

TITLE: Electrostatic vapor/aerosol generator with method and apparatus for conditioning building spaces

DATE-ISSUED: January 17, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Peltier; Mark E.	Minneapolis	MN		

US-CL-CURRENT: 422/121; 239/34, 239/44, 422/124, 422/22, 422/305, 422/5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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☐ 49. Document ID: US 5330559 A

L5: Entry 49 of 87

File: USPT

Jul 19, 1994

US-PAT-NO: 5330559

DOCUMENT-IDENTIFIER: US 5330559 A

TITLE: Method and apparatus for electrostatically cleaning particulates from air

DATE-ISSUED: July 19, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cheney; William A.	Cincinnati	OH		
Spurgin; Wendell P.	Cincinnati	OH		

US-CL-CURRENT: 95/63; 95/78, 96/55, 96/59, 96/66, 96/68, 96/77, 96/99

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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☐ 50. Document ID: US 5310608 A

L5: Entry 50 of 87

File: USPT

May 10, 1994

US-PAT-NO: 5310608
DOCUMENT-IDENTIFIER: US 5310608 A
** See image for Certificate of Correction **

TITLE: Temperature difference storage battery

DATE-ISSUED: May 10, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ishizawa; Maki	Tokyo			JP
Ogata; Tsutomu	Sayama			JP
Shindo; Kazuhiko	Tokyo			JP
Kitada; Syuichi	Iruma			JP
Koyama; Mitsunori	Nishikatsura			JP

US-CL-CURRENT: 429/11; 429/24

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
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